

DETAILED ACTION

Status of Application, Amendments and/or Claims

The amendment of 30 January 2006 has been entered in full. Claims 1-23 are cancelled. Claims 24-38 are added.

Election/Restrictions

1. Restriction is required under 35 U.S.C. 121 and 372.

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In accordance with 37 CFR 1.499, applicant is required, in reply to this action, to elect a single invention to which the claims must be restricted.

Group I, claim(s) 24-29, drawn to a method of treatment for the promotion of cartilage and/or bone formation comprising administering CXCL6.

Group II, claim(s) 30-34, drawn to a method of treatment for the promotion of cartilage and/or bone formation comprising administering CXCL6-expressing cells.

Group III, claim(s) 35, drawn to a method of determining chondrocyte phenotypic stability of a cell population comprising (a) providing a chondrocyte cell population and (c) determining expression of CXCL6.

Group IV, claim(s) 36, drawn to a method of inducing or restoring chondrocyte phenotypic stability in a progenitor cell population in vitro comprising administering CXCL6 to said progenitor cell population.

Group V, claim(s) 37, drawn to a method of inducing or restoring differentiation of a precursor cell population into chondrocytes comprising administering CXCL6 to said precursor cell population.

Group VI, claim(s) 38, drawn to a method for producing a medicament comprising obtaining cell from a cartilage biopsy, selecting cells therefrom based on CXCL6 expression, and formulating said CXCL6 expressing cell in a medicament.

Art Unit: 1647

2. The inventions listed as Groups I-VI do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons:

Groups I-VI claim different methods. Group I recites the special technical feature of administering CXCL6 to promote cartilage and/or bone formation, which is not required by the other methods. Group II recites the special technical feature of administering CXCL6-expressing cells to promote cartilage and/or bone formation, which is not required by the other methods. Group III recites the special technical feature of determining chondrocyte phenotypic stability of a cell population comprising (a) providing a chondrocyte cell population and (c) determining expression of CXCL6, which is not required by the other methods. Group IV recites the special technical feature of inducing or restoring chondrocyte phenotypic stability in a progenitor cell population in vitro comprising administering CXCL6 to said progenitor cell population, which is not required by the other methods. Group V recites the special technical feature of inducing or restoring differentiation of a precursor cell population into chondrocytes comprising administering CXCL6 to said precursor cell population, which is not required by the other methods. Group VI recites the special technical feature of producing a medicament comprising obtaining cell from a cartilage biopsy, selecting cells therefrom based on CXCL6 expression, and formulating said CXCL6 expressing cell in a medicament, which is not required by the other methods.

3. Restriction for examination purposes as indicated is proper because all these inventions listed in this action are independent or distinct for the reasons given above and there would be a serious search and examination burden if restriction were not required because one or more of the following reasons apply:

- (a) the inventions have acquired a separate status in the art in view of their different classification;
- (b) the inventions have acquired a separate status in the art due to their recognized divergent subject matter;
- (c) the inventions require a different field of search (for example, searching different classes/subclasses or electronic resources, or employing different search queries);
- (d) the prior art applicable to one invention would not likely be applicable to another invention;

(e) the inventions are likely to raise different non-prior art issues under 35 U.S.C. 101 and/or 35 U.S.C. 112, first paragraph.

Applicant is advised that the reply to this requirement to be complete must include (i) an election of a invention to be examined even though the requirement may be traversed (37 CFR 1.143) and (ii) identification of the claims encompassing the elected invention.

The election of an invention may be made with or without traverse. To reserve a right to petition, the election must be made with traverse. If the reply does not distinctly and specifically point out supposed errors in the restriction requirement, the election shall be treated as an election without traverse. Traversal must be presented at the time of election in order to be considered timely. Failure to timely traverse the requirement will result in the loss of right to petition under 37 CFR 1.144. If claims are added after the election, applicant must indicate which of these claims are readable on the elected invention.

If claims are added after the election, applicant must indicate which of these claims are readable upon the elected invention. Should applicant traverse on the ground that the inventions are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the inventions to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bridget E. Bunner whose telephone number is (571) 272-0881. The examiner can normally be reached on 8:30-4:30 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Manjunath Rao can be reached on (571) 272-0939. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

BEB
Art Unit 1647
09 November 2007

/Bridget E Bunner/
Primary Examiner, Art Unit 1647